UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Paper No. 20

Application Number: 09/495,250
Filing Date: January 31, 2000
Appellant(s): LEE ET AL.

Technology Center 2100

JAN 2 8 2004

MAILED

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For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 10/20/2003.

(1)   Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2)   Related Appeals and Interferences

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3)   Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4)   Status of Amendments After Final

No amendment after final has been filed.

(5)   Summary of Invention

The summary of invention contained in the brief is correct.

(6)   Issues

The appellant's statement of the issues in the brief is correct.

(7)   Grouping of Claims

Appellant's brief includes a statement that claims 13-14 and 21-26 do not stand

or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

(8)   Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9)   Prior Art of Record

6,128,398	KUPERSTEIN	10-2000
6,041,140	BINNS	03-2000

(10)   Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 13-14 are rejected under 35 U.S.C. § 103, Kuperstein et al (U.S. Patent

No. 6,128,398). Claims 21-26 are rejected under 35 U.S.C. § 103, Binns et al (U.S.

Patent No. 6,041,140). This rejection is set forth in prior Office Action, Paper No. 17.

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2.   Claims 13 and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by

Kuperstein et al (U.S. Patent No. 6,128,398, hereinafter, "Kuperstein").

With respect to claim 13, Kuperstein discloses method of constructing a

multimedia data, incorporating a feature information including features of an image, see

(90, normalize feature sets, FIG. 2, col. 1, lines 52-67 to col. 1, lines 16, col. 2, lines 63-

67 to col. 3, lines 1-30, col. 8, lines 40-67 to col. 9, lines 1-5, facial image is feature that

includes feature elements, for instance, eyes, nose and mouth, etc); and incorporating a

weight information including weight information of the features, and weight information

of the feature elements, see (col. 2, lines 63-67 to col. 3, lines 1-30, col. 6, lines 16-57).

With respect to claim 14, Kuperstein discloses the feature and the feature

elements are represented by an image characteristic structure, global information which

represents a feature of a whole image (facial image), see (FIG. 1, FIG. 2, col.1, lines 17-

61, col. 2, lines 63-67 to col. 3, lines 1-30, col. 8, lines 40-67 to col. 9, lines 1-5); and

spatial information which represents a feature of an image region (each feature

from facial image, for instance, eyes, nose, mouth, etc), wherein the image

characteristic structure further comprises a weight information which represents the

importance of the global information, see (FIG. 1, FIG. 2, col.1, lines 17-61, col. 2, lines

63-67 to col. 3, lines 1-30, col. 8, lines 40-67 to col. 9, lines 1-5).

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 21-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Binns et al (U.S. Patent No. 6,041,140, hereinafter, "Binns").

With respect to claims 21 and 24, Binns discloses the searching for a target

image based on search criteria, inputting a first image that is similar to the target image,

see (500, image data 1, FIG. 5, col. 9, lines 6-44); inputting a second image to the

target image, see (510, image data 2, FIG. 5, col. 9, lines 6-44); and

correlating the first image (500, image data 1, FIG. 5) and the second image (510,

image data 2, FIG. 5) to construct the search criteria (col. 2, lines 13-35, col. 2, lines 50-

67, FIG. 4, col. 8, lines 52-67 to col. 9, lines 1-5). Binns discloses the similarity of

images. Binns does not explicitly disclose the dissimilar of image. However, disclosed

system of Binns is to get the similarity of images with correlation image rules. And when

assume that, if the similarity is 90% stands for also that the dissimilarity is 10%.

Therefore, it would have been obvious a person having ordinary skill in the art the time

invention was made to include the dissimilar of image in the system of Binns to distinct

the difference of images. Because the dissimilarity of images provides the improved

images searching method with the similarity of images.

With respect to claims 22-23 and 25-26, Binns discloses, identifying a feature

that is common and not common between the first image and the second image; and

decreasing and decreasing the weight of the identified feature in the search

criteria, see (col. 2, lines 13-35, col. 2, lines 50-67, FIG. 4, col. 8, lines 52-67 to col. 9,

lines 1-5).

(11)   Response to Argument

Issue 1:

The applicants argue that the reference (Kuperstein et al, U.S. Patent No.

6,128,398) that is applied to the rejection for claims 13 and 14 under U.S.C. § 102(e),

does not teach or disclose incorporating weight information of features and weight

information of features elements. However, the examiner traverses. The applicants

claimed invention's main point is that an image includes feature and feature elements

and incorporating weight information of features and weight information of features

elements for whole image. As discussed in the rejection above, Kuperstein discloses,

the system will find features, such as eyes, nose, mouth, etc. and then determine facial

recognition using the ratios of those features in a neural network, see (col. 1, lines 41-

61). This teaches that the facial image (feature) includes, eyes, nose and mouth, etc

(feature elements). Kuperstein also discloses, each feature element is weighted (col. 3,

lines 1-15, and col. 8, lines 40-50). Conclusively, Kuperstein discloses, each weighted

feature is incorporated into the output (46, FIG. 2, col. 6, lines 11-59) that is weighted

facial image (weight information of feature). Therefore, Kuperstein teaches incorporating

weight information of features and weight information of features elements.

Issue 2:

The applicants argue that the reference (Binns et al, U.S. Patent No. 6,041,140)

that is applied to the rejection for claims 21-26 under 35 U.S.C. § 103(a), does not teach

or disclose correlating a first image that is dissimilar to a target image and a second

image which is *dissimilar to the target image* (applicant's argument point) to construct

a search criteria. However, the examiner traverses.

Binns discloses, inputting the first image and second image, (FIG. 5, col. 4, lines

9-26, col. 9, lines 6-39) and correlating the first image that is similar to a target image

(col.2, lines 13-24, col. 7, lines 46-65) and the second image (FIG. 5, col. 4, lines 9-26,

col. 9, lines 6-39). And Binns discloses the second image to construct search criteria

(col. 2, lines 13-35, col. 2, lines 50-67, FIG. 4, col. 8, lines 52-67 to col. 9, lines 1-5).

Thus, so far, Binns discloses, inputting the first image and second image, (FIG. 5, col. 4,

lines 9-26, col. 9, lines 6-39) and correlating the first image that is similar to a target

image (col.2, lines 13-24, col. 7, lines 46-65) and the second image. The applicant's

argument point is that a *prima facie* case of the examiner's conclusion of obviousness

has not been established under 25 U.S.C. § 103(a) for "the dissimilar image" limitation.

However, disclosed system of Binns is to get the similarity of images with correlation

image rules (col. 2, lines 13-25). And when assume that, if the similarity is 90%, which

stands for also that the dissimilarity is 10%. For instance, between two objects, if two

objects are similar, which means that two objects are not same, also means that two

objects are dissimilar. Thus, the ordinary person who has ordinary skill in the art clearly

at the time of the invention was made understands that the **"dissimilarity"** can be

interpreted based on **"similarity"**. Therefore, it would have been **obvious a person**

having ordinary skill in the art the time invention was made to include the dissimilar

to the target image in the system of Binns for searching images.

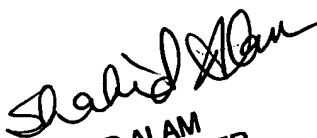For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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